TM 43-0002-1
T. O. 13C3-1-10
NAVAIR 13-1-19

TECHNICAL MANUAL

PROCEDURES FOR THE DESTRUCTION OF AIR DELIVERY EQUIPMENT TO PREVENT ENEMY USE

This copy is a reprint which includes current pages from Changes 1.

This manual supersedes TM 750-244-1-1 TO 13C3-1-10, 22 October 1971

HEADQUARTERS, DEPARTMENT OF THE ARMY **30 APRIL 1974**

CHANGE
No. 1

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON. D.C., 23 December 1980

Procedures for the Destruction

of

AIR DELIVERY EQUIPMENT

TO PREVENT ENEMY USE

TM 43-0002-1, T.O. 13C3-1-10, NAVAIR 13-1-19, 30 April 1974, is changed as follows:

1. Warning is superseded as follows.

2. Remove and insert pages as indicated below.

	Remove pages	Insert pages
Chapter 1	1-1 and 1-2	1-1 and 1-2
Chapter 2	2-1 and 2-3/2-4	2-1 and 2-2

3. New or changed text material is indicated by a vertical bar in the margin. An illustration change is indicated by a miniature pointing hand.

4. Retain this sheet in front of manual for reference purposes.

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WARNING PAGE

Personnel performing operations, procedures, and practices that are included or implied in this technical manual shall adhere to the following instructions. Disregard of these warnings can cause serious or fatal injury to personnel.

FIRE (para. 2-2) Exercise extreme care when using highly flammable petroleum products to destroy equipment by fire.

EXPLOSIVE DEMOLITION (para. 2-3). Use areas free of personnel, when destroying equipment with explosives, to prevent injuries from flying fragments.

M233 PARACHUTE EJECTOR (para. 2-8). Do not attempt to fire an M233 cartridge-actuated parachute ejector unless it is installed in a packed 24-foot-diameter chest personnel parachute.

M233 PARACHUTE EJECTOR (para. 2-8) During destruction procedures, secure each initiator with a cotter pin or similar type device prior to removal of initiators from the M233 parachute ejector.

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EXPLOSIVE DEMOLITION (para. 2-3). Use areas free of personnel, when destroying equipment with explosives, to prevent injuries from flying fragments.

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CHAPTER 1
INTRODUCTION
Section I. GENERAL

1-1. Scope.
This manual prescribes equipment priorities, methods, and techniques that are to be used in the destruction of air delivery equipment to prevent enemy use when capture or abandonment of the equipment is imminent.

1-2. Purpose
The purpose of this publication is to provide personnel with guidance that will permit quick, effective, and safe means of rendering inoperative or destroying air delivery equipment that is in imminent danger of capture by an enemy.

1-3. Reporting of Errors.
The reporting of errors, missions, and recommedations for improving this publication by the individual user is encouraged Preparation and submission of reports will be as follows:

a. Reports by US Army personnel should be submitted on DA Form 2028 (Recommended Changes to DA Publications) and fowarded direct to commander, US Army Troop Support and Aviation Material Readiness Command, ATTN: DRSITS-MF 4300 Goodfellow Blvd., St. Louis, MO 63120. A reply will be furnished to you.

b. Report by US Air Force units should be submitted on AFTO Form 22, Technical Order Publication Improvrment Report, and fowarded to the address cited in paragraph a, above. An information copy of the prepared AFTO Form 22 shall be furnished to SSMA/ MMSTR, Kelly AFB, Texas 78241.

c. Reports by U.S. Navy personnel shall be submitted in accordance with instructions contained in publication OPNAVINST 4790.2B.

Section II. PRELIMINARY CONSIDERATIONS

1-4. General.
Destruction of air delivery equipment that is in imminent danger of capture by an enemy is a command decision that must be made by a battalion or higher commander the equivalent. Upon receipt of orders from proper authority, equipment destruction may be initiated and should be thorough as time, personnel, and means permit.

1-5. General
All units which possess air delivery equipment should have a plan for the implementation of destruction procedures to insure that the maximum and most effective damage is done to equipment to deny use of the equipment to an enemy. The plan should outline the extent of destruction be performed, priorities of destruction as applicable to the assigned air delivery items, and the amount of explosives required, if applicable. Additionally, the plan must be flexible enough in the designation of time, equipment and personnel to fit an tactical withdrawal situation. To prevent equipment cannabalization by an enemy, unit personnel who are air delivery oriented shall be familiar with the priority sequence in which essential air delivery items,
including repair parts in stock, are to be destroyed. The applicable
unit personnel shall also be familiar with the sequence to be followed
for total destruction of unit air delivery equipment.

Section III. PRIORITIES FOR DESTRUCTION

1-6. General
a. Priority be always be given to the destruction of of classified air delivery equipment and associated documents.
b. When lack of time and /or stores prevent complete destruction of air delivery equipment, priority is to be given to the destruction of essential parts, and the same parts are to be destroyed on all like items.
c. A guide to priorities for destruction of repair parts for air delivery equipment is contained in table 1-1.

1-7. Repair Parts.
The same priority for destruction of repair parts of a major item necessary to render that item inoperable must be given to the destruction of similiar repair parts located in storage areas.

1-8. Priorities for Destruction of Parts of Military Technical Equipment.
Table 1-1 is a list of air delivery equipment and associated parts that are to be destroyed and the priority designation of each item.

Table 1-1. Priorities /or Destruction of Air Delivery Equipment

Equipment	Priority	Parts
Airdrop Electronic Guidance Control Systems	1	Transmitter (channel selector, crystals, battery, antennae)
	2	Receiver (crystal, antennas)
	3	Test stand
Troop-Type and FREE FALL Parachute (Back and Chest) Oxygen bot tle. Mask and Helmets	1	Canopy
	2	Parachute ejector (as applicable)
	3	Harness
	4	Deployment bog
	5	Pack
	6	Static line
	7	Automatic ripcord release (as appli cable)
	8	Ripcord gtip and cable
Emergenrcy-Type Personnel Parachutes (Including MK-J5 Ejection Semi Parachute System)	1	Canopy
	2	Harness
	3	Pack
	4	Automatic ripcord release (as appli-cable)
	5	Ripcord grip and cable
	6	Drogue assembly (as applicable)
	7	Drogue container (as applicble)
Cargo and Extraction Para-chutes	1	Canopy
	2	Reefing line cutter
	3	Deployment bag
	4	Static line
	5	Risers
	6	Pilot parachute (as applicable)
	7	Drogue device (as applicable
	8	Extractiom line
A-7A Aerial Delivery Cargo Sling	1	Straps
		2 Dee-rings
A-21 Aerial Delivery Cargo Bag lan-	1	Sling with scuff pad attached
	2	Quick-release device
	3	Quick-release strap and safety clip
	4	Ring straps
	5	Cover
A-22andA-23 Aerial Delivery Cargo Bags	1	Sling
	2	Suspension webs
	3	Skid
	4	Cover
	5	Cover lacing cord

Table 1-1. Priorities for Destruction of Air Delivery Equipment (Continued)

Equipment	Priority	Parts
Aerial Delivery Concentric-looping Slings	1	Concentric loop webbing
Multiple Leg Slings	1	Web ring
	2	Sling leg
	3	Chain leg
	4	Grab link
Lowering and Extraction Devices	1	Rope
	2	Harness
	3	Governor
	4	Ladder
	5	Tiedown devices
	6	Carrying case
Airdrop Platforms	1	Platform panels
	2	Side rails
	3	Tidown clevices
Extraction Force Transfer CouplIng	1	Cable assembly
	2	Actuator assembly
	3	Latch assembly
	4	Link assembly
	5	Webbing
Restraint Devlces	1	Tiedown straps
	2	Tiedown chain locking mechanism
	3	Nets
	4	Binders
	5	Tiedown chains
	6	Engine restraint strap
Connecting Devices	1	Clevis assemblies
	2	Link assemblies
	3	Load -couplers
	4	Suspension brackets
	5	Clevis and link cover
Cargo Parachute Release Assemblies	1	Time delay assembly
	2	Firing mechanism
	3	Parachute links
	4	Toggles
	5	Toggle lock slide
	6	Lower suspension links
	7	Arming wire and yard
	8	Side plates
Aerial Recovery Kit	1	Kit container
	2	Sling assembly
	3	Load stabilizers
	4	Load spreader
	5	Spreader bar assembly
	6	Hardware compon ent

Table 1-1. Priorities /or Destruction of Air Delivery Equipment (Continued)

Equipment	Priority	Parts
Automatic Ripcord Test Set	1	Vacuum pump
	2	
	3	
	4	
	5	
	6	

Table 1-1. Priorities for Destruction of Air Delivery Equipment (Continued)

Equipment	Priority	Parts
Maintenance Equipment	1	Parachute shadow table
Bell jar	2	Parachute packing hook
Altimeter	3	Suspension line separator
Gage	4	Parachute packing paddle
Spring scale	5	Packing weight
Shield		

Section IV. DEGREE OF DAMAGE

1-9. General.

Methods of destruction used to inflict damage on air delivery equipment and essential spare parts should achieve a degree of damage which makes it impossible to restore the damaged equipment to a usable condition in a combat zone by either repair or cannibalization.

1-10. Classified Equipment.

Air delivery equipment that is classified must be destroyed to such a degree as to prevent duplication, or employment of any air delivery equipment item shall or revealing the means of operation or function to the enemy.

1-11. Associated Classified Documents.

All associated classified documents, notes, instructions, drawings, parts lists, or other written material which pertains to the function, operation, maintenance, be destroyed in such a manner as to render the documentation useless to an enemy.

Chapter 2
METHODS OF DESTRUCTION

Section I. DESCRIPTION AND ORDER OF DESTRUCTION METHODS

2-1. Self-Destruction Devices.

Self-destruction devices, which are normally activated by a switch, are built-in assemblies that my partially or completely destroy item to which the devices are affixed. A self-destruction device is usually well marked for identification. When installed, re self-destruction devices should be activated nod allowed to function prior to using explosives or any other destruction methods. This action will permit the devices to destroy the applicable equipment and prevent sensitive parts or classified documentation from being blown into safe areas where they might be recovered by an enemy.

2-2. Fire.

WARNING

Exercise extreme care when using petroleum products to destroy equipment by fire, as these materials are highly flammable.

The destruction of equipment by use of fire is an 2-5. effective method of destroying low-melting-point metal items and equipment made from textile materials. However, mechanical destruction should be completed first, whenever possible, before initiating destruction by fire. When items to be destroyed are made of metal, textile materials should be packed under tad around the items, then soaked with a flammable petroleum product and ignited. Proper concentration of equipment which is suitable for burning will provide a hotter and more destructive fire.

2-3. Explosive Demolition.

WARNING

Destruction of equipment using explosive shell be performed in an area free of personnel to prevent injury that could be caused by flying fragments.

For information on the use of explosives to destroy equipment, refer to FM 5-25, Explosives and Demolition.

NOTE

The placement of a demolition charge can mean the difference between accomplishing minor damage or complete destruction of equipment

2-4. Mechanical.

Air delivery equipment can be destroyed by mechanical means using suitable tools for hammering, prying, cutting, ripping, or slashing as specified in paragraphs 2-7 and 2-9.

2-5. Natural Surroundings

Disposal or denial of equipment to an enemy my be accomplished through use of natural surroundings. Accessible vital parts of assemblies may be removed sad scattered through dense foilage, buried in dirt or sand, or thrown into a lake, stream, or other body of water. Total submersion of equipment in a body of water will provide water damage as well as concealment. Salt water will inflict extensive damage to air delivery equipment.

Section II. SPECIAL INSTRUCTIONS FOR AIR DELIVERY EQUIPMENT DESTRUCTION

2-6. Airdrop Electronic Guidance Control Systems.

a. When the tactical situation and time permits, an airdrop electronic guidance control system, which may include a transmitter and receiver, will be destroyed by mechanical means and fire or disposed of by bury- ing. However, prior to initiating destruction methods, insure the crystals and batteries are removed from the transmitting and receiving units and destroyed with a hammer or other similar tool or buried.

b. If the situation prohibits the destruction procedures as prescribed in paragraph above, then after the crystals and batteries are removed, *a -pound explosive charge shall be affixed to the back of each transmitter and receiver, and equipment destructions will be completed by detonation of the charges.

c. If applicable, test stands shall be demolished using hammers, bolt cutters, hacksaws, or similar type tools.

2-7. Parachute Canopies and Other Textile Items.

Parachute canopies and other air delivery textile items shall be demolished by using shears, fabric cutters, awls, files, knives, screwdrivers, pack hooks, rigging, packing, maintenance, or storage of air or other similar devices to cut, rip, tear, or slash assembly fabric, lines, loops, straps, and tapes, or they shall be piled loosely and burned, using gasoline, cleaning solvent, oil, grease, paraffin, beeswax, rubber, wood, or other flammable materials as a fire starter.

2-8. Paragraph deleted.

2-9. Metal Items and Packing Aids.

Air delivery equipment metal assemblies, parts, and packing aids shall be destroyed using hammers, bolt cutters, files, hacksaws, drills, screwdrivers, crow-bas, or other similar devices to smash, break, bed, or cut. Items that may be destroyed by fire shall he burned as prescribed in paragraph 2-2. Small vital be disposed of as outlined in paragraph 2-5.

2-10. Training.

All personnel who use or perform such functions s of air delivery equipment should receive thorough training air delivery equipment destruction procedures and methods as prescribed in this publication. The destruction methods demonstrated during training should be simulated. It must be deposited in the training program, that destruction thorough use of ex plosives is usually necessitated by critical situations when the time available for implementing other equipment destruction methods is limited. Upon completion of training, all applicable personnel should be thoroughly familiar with air delivery equipment destruction methods and be capable of performing destruction without immediate reference to any publication.

All data on page 2-3. including figure 2-1 deleted.

This publication is published for the use of all concerned.

By Order of the Secretaries of the Army, Air Force, and the Navy.

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General, United States Army
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The Metric System and Equivalents

Linear Measure

1 centimeter = 10 millimeters = .39 inch
1 decimeter = 10 centimeters = 3.94 inches
1 meter = 10 decimeters = 39.37 inches
1 dekameter = 10 meters = 32.8 feet
1 hectometer = 10 dekameters = 328.08 feet
1 kilometer = 10 hectometers = 3,280.8 feet

Weights

1 centigram = 10 milligrams = .15 grain
1 decigram = 10 centigrams = 1.54 grains
1 gram = 10 decigram = .035 ounce
1 dekagram = 10 grams = .35 ounce
1 hectogram = 10 dekagrams = 3.52 ounces
1 kilogram = 10 hectograms = 2.2 pounds
1 quintal = 100 kilograms = 220.46 pounds
1 metric ton = 10 quintals = 1.1 short tons

Liquid Measure

1 centiliter = 10 milliliters = .34 fl. ounce
1 deciliter = 10 centiliters = 3.38 fl. ounces
1 liter = 10 deciliters = 33.81 fl. ounces
1 dekaliter = 10 liters = 2.64 gallons
1 hectoliter = 10 dekaliters = 26.42 gallons
1 kiloliter = 10 hectoliters = 264.18 gallons

Square Measure

1 sq. centimeter = 100 sq. millimeters = .155 sq. inch
1 sq. decimeter = 100 sq. centimeters = 15.5 sq. inches
1 sq. meter (centare) = 100 sq. decimeters = 10.76 sq. feet
1 sq. dekameter (are) = 100 sq. meters = 1,076.4 sq. feet
1 sq. hectometer (hectare) = 100 sq. dekameters = 2.47 acres
1 sq. kilometer = 100 sq. hectometers = .386 sq. mile

Cubic Measure

1 cu. centimeter = 1000 cu. millimeters = .06 cu. inch
1 cu. decimeter = 1000 cu. centimeters = 61.02 cu. inches
1 cu. meter = 1000 cu. decimeters = 35.31 cu. feet

Approximate Conversion Factors

To change	*To*	*Multiply by*	*To change*	*To*	*Multiply by*
inches	centimeters	2.540	ounce-inches	newton-meters	.007062
feet	meters	.305	centimeters	inches	.394
yards	meters	.914	meters	feet	3.280
miles	kilometers	1.609	meters	yards	1.094
square inches	square centimeters	6.451	kilometers	miles	.621
square feet	square meters	.093	square centimeters	square inches	.155
square yards	square meters	.836	square meters	square feet	10.764
square miles	square kilometers	2.590	square meters	square yards	1.196
acres	square hectometers	.405	square kilometers	square miles	.386
cubic feet	cubic meters	.028	square hectometers	acres	2.471
cubic yards	cubic meters	.765	cubic meters	cubic feet	35.315
fluid ounces	milliliters	29,573	cubic meters	cubic yards	1.308
pints	liters	.473	milliliters	fluid ounces	.034
quarts	liters	.946	liters	pints	2.113
gallons	liters	3.785	liters	quarts	1.057
ounces	grams	28.349	liters	gallons	.264
pounds	kilograms	.454	grams	ounces	.035
short tons	metric tons	.907	kilograms	pounds	2.205
pound-feet	newton-meters	1.356	metric tons	short tons	1.102
pound-inches	newton-meters	.11296			

Temperature (Exact)

°F	Fahrenheit temperature	5/9 (after subtracting 32)	Celsius temperature	°C

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